

Amendments to the Claims:

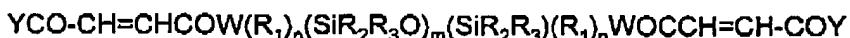
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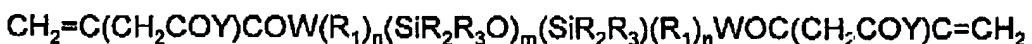
1. (Original) A method of forming a surface modified medical device, the method comprising:

providing a medical device comprising a copolymer prepared by polymerizing a monomer mixture comprising,

(A) 20 to 80 weight % of at least one prepolymer selected from the group consisting of compounds having the following formula:



and



wherein R₁ is selected from the group consisting of alkynes and alkynes containing ether linkages, R₂ and R₃ are independently selected from the group consisting of alkyl groups, phenyl groups, alkyl groups substituted with halogen, phenyl groups substituted with halogen, alkyl groups containing ether linkages and phenyl groups containing ether linkages, W is O or NH, n is an integer between 1 and 10, m is an integer between 2 and 200, and Y is a residue having a reactive functional group selected from the group consisting of hydroxyl, carboxyl, oxazolone, epoxy and anhydride functional groups, and

(B) 5 to 50 weight % of at least one copolymerizable device-forming monomer, contacting a surface of the device with a solution containing a surface modifying agent having functionality complementary to the functionalized silicone-containing copolymer; and

subjecting the device surface and surface modifying agent to reaction conditions suitable for forming a covalent bond between the functionalized silicone-containing copolymer and the surface modifying agent having functionality complementary to the functionalized silicone-containing copolymer while the surface modifying agent is in contact with the device surface to form a surface modified medical device.

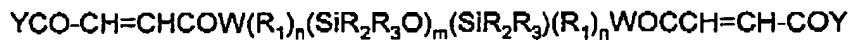
2. (Original) The method of claim 1 wherein R₁ contains 1 to 10 carbon atoms.

3. (Original) The method of claim 1 wherein the copolymer prepared by polymerizing a monomer mixture further comprises,

10 to 50 weight % of at least one additional silicone-containing monomer and 10 to 50 weight % of at least one copolymerizable device-forming hydrophilic monomer.

4. (Original) The method of claim 1 wherein,

component (A) has the following formula:



wherein R₁ is selected from the group consisting of alkynes and alkynes containing ether linkages, R₂ and R₃ are methyl, n is 4, m is an integer between 5 and 200, W is O, and Y is OH and is in a *trans* configuration.

5. (Original) The method of claim 1 wherein,

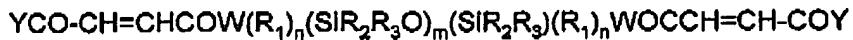
component (A) has the following formula:



wherein R₁ is selected from the group consisting of alkynes and alkynes containing ether linkages, R₂ and R₃ are methyl, n is 4, m is an integer between 5 and 200, W is O, and Y is OH.

6. (Original) The method of claim 1 wherein,

component (A) has the following formula:



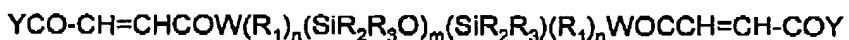
wherein R₁ is selected from the group consisting of alkynes and alkynes containing ether linkages, R₂ and R₃ are methyl, n is 4, m is an integer between 5 and 200, W is O, and Y is OH and is in a *cis* configuration.

7. (Original) The method of claim 1 wherein the medical device formed is selected from the group consisting of heart valves, intraocular lenses, contact lenses, intrauterine devices, vessel substitutes, artificial ureters and artificial breast tissue.

8. (Original) The method of claim 7 wherein the medical device formed is a contact lens.

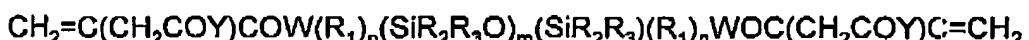
9. (Original) The method of claim 8 wherein the medical device formed is a soft contact lens.

10. (Original) The method of claim 3 wherein, component (A) has the following formula:



wherein R₁ is selected from the group consisting of alkynes and alkynes containing ether linkages, R₂ and R₃ are methyl, n is 4, m is an integer between 5 and 200, W is O and Y is OH and is in a *trans* configuration.

11. (Original) The method of claim 3 wherein, component (A) has the following formula:



wherein R₁ is selected from the group consisting of alkynes and alkynes containing ether linkages, R₂ and R₃ are methyl, n is 4, m is an integer between 5 and 200, W is O and Y is OH.

12. (Original) The method of claim 3 wherein, component (A) has the following formula:



wherein R₁ is selected from the group consisting of alkynes and alkynes containing ether linkages, R₂ and R₃ are methyl, n is 4, m is an integer between 5 and 200, W is O, and Y is OH and is in a *cis* configuration.

13. (Original) The method of claim 3 wherein the medical device formed is selected from the group consisting of heart valves, intraocular lenses, contact lenses, intrauterine devices, vessel substitutes, artificial ureters and artificial breast tissue.

14. (Original) The method of claim 13 wherein the medical device formed is a contact lens.

15. (Original) The method of claim 14 wherein the medical device formed is a soft contact lens.

16-21 (Cancelled)